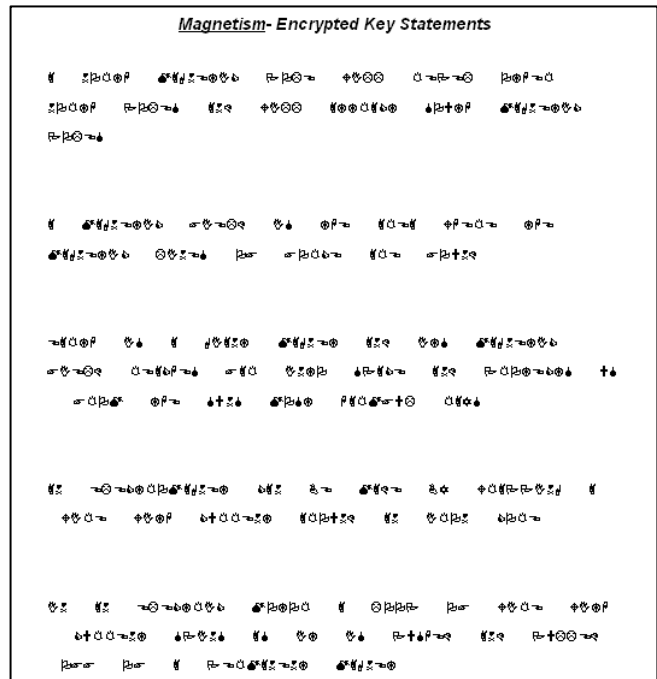


Magnetism-Decode Encrypted Statements

From the moment you lay this handout in front of your students a challenge will be made- can you decode this “top secret” message without any help at all? After the panic dies down and students realize you’re serious, they’ll take a chance on a word and guess right. From there it’s all downhill. This is a fun change of pace from the norm, and an easy way to get students to pay close attention to key statements.

Use this same idea any other time you wish, with any statements you wish. Type in your statements (all caps, no punctuation), select the font to change to (in this case *Wingdings), and then check that the words are spaced out right before printing.



The way you set this up is pretty straightforward- type in the key statements you want students to decode and then change the font.

Here are some statements you’re welcome to use. Feel free to make any changes.

A NORTH MAGNETIC POLE WILL REPEL OTHER NORTH POLES AND WILL ATTRACT SOUTH MAGNETIC POLES

A MAGNETIC FIELD IS THE AREA WHERE THE MAGNETIC LINES OF FORCE ARE FOUND

EARTH IS A GIANT MAGNET AND ITS MAGNETIC FIELD REACHES FAR INTO SPACE AND PROTECTS US FROM THE SUNS MOST HARMFUL RAYS

AN ELECTROMAGNET CAN BE MADE BY WRAPPING A WIRE WITH CURRENT AROUND AN IRON CORE

IN AN ELECTRIC MOTOR A LOOP OF WIRE WITH CURRENT SPINS AS IT IS PUSHED AND PULLED OFF OF A PERMANENT MAGNET

This is available as a ready-made Student Handout- see last page. There is also a PowerPoint you can use when going over the answers.

Tips:

- When you type, use all caps so there's no issue of what letter we're talking about. Sometimes, depending on the font you choose, a capitol and lower-case of the same letter can be different.
- Don't include any punctuation. It makes things so much easier when you can hand this to students and tell them they don't have to worry about commas and periods.
- Put 5 spaces in between each word so the symbols don't get too bunched up. Double space in between statements.
- The easiest font to change to is one called Wingdings. When your statements are all typed in, drag your mouse over all the text, select the font drop-down menu and select Wingdings.
- There are other "encryption" fonts in there too- give them a look, and just go with the one that has symbols that look the most different.
- You can already see the potential this idea has to be used with any chapter, so, yes, go ahead and use it any time of the year with any chapter.

Come back and visit InteractiveScienceTeacher.com to upgrade this lesson with:

PowerPoint- lead your students through the answers click-by-click

Magnetism- Encrypted Key Statements

! !00? #!1*05! !00~ *500 0~5~0 00?0
!00? !00~! !1! *000 !000!0~ !00? #!1*05!
!00~!

Magnetism- Encrypted Key Statements

! !00? #!1*05! !00~ *500 0~5~0 00?0
!00? !00~! !1! *000 !000!0~ !00? #!1*05!
!00~!
**A NORTH MAGNETIC POLE WILL REPEL OTHER
NORTH POLES AND WILL ATTRACT SOUTH MAGNETIC
POLES**

Magnetism- Encrypted Key Statements

! !00? #!1*05! !00~ *500 0~5~0 00?0
!00? !00~! !1! *000 !000!0~ !00? #!1*05!
!00~!
**A NORTH MAGNETIC POLE WILL REPEL OTHER
NORTH POLES AND WILL ATTRACT SOUTH MAGNETIC
POLES**

! #!1*05! 0~5~0 5! 0? 00? #?0~ 0?
#!1*05! 00!~! 0~ *00~ 00~ *000!
**A MAGNETIC FIELD IS THE AREA WHERE THE
MAGNETIC LINES OF FORCE ARE FOUND**

Student Handout

Magnetism- Encrypted Key Statements

1. North magnetic pole will repel other north poles and will attract south magnetic poles.

2. A magnetic field is the area where the magnetic lines of force are found.

3. Earth is a giant magnet and its magnetic field reaches far into space and protects us from the sun's most harmful rays.

4. An electromagnet can be made by wrapping a wire with current around an iron core.

5. In an electric motor a loop of wire with current spins as it is pushed and pulled off of a permanent magnet.

Answers to Handout

ANSWERS- Encrypted Key Statements

1. NORTH MAGNETIC POLE WILL REPEL OTHER NORTH POLES AND WILL ATTRACT SOUTH MAGNETIC POLES.

2. A MAGNETIC FIELD IS THE AREA WHERE THE MAGNETIC LINES OF FORCE ARE FOUND.

3. EARTH IS A GIANT MAGNET AND ITS MAGNETIC FIELD REACHES FAR INTO SPACE AND PROTECTS US FROM THE SUN'S MOST HARMFUL RAYS.

4. AN ELECTROMAGNET CAN BE MADE BY WRAPPING A WIRE WITH CURRENT AROUND AN IRON CORE.

5. IN AN ELECTRIC MOTOR A LOOP OF WIRE WITH CURRENT SPINS AS IT IS PUSHED AND PULLED OFF OF A PERMANENT MAGNET.

Magnetism- Encrypted Key Statements

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